

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	10/541,059	BROYDE ET AL.
	Examiner	Art Unit
	Jason Crawford	2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 8/4/2006.
2.  The allowed claim(s) is/are 1-20.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed on 8/4/2006, with respect to claims 1, 1, 8 and 11 have been fully considered and are persuasive. The Statutory Double Patenting rejections mailed on 5/11/2006 has been withdrawn. The current application would still have a pending Non-Statutory Double Patenting rejection, however, MPEP §804 states:

*"If "provisional" ODP rejections in two applications are the only rejections remaining in those applications, the examiner should withdraw the ODP rejection in the earlier filed application thereby permitting that application to issue without need of a terminal disclaimer"*

Therefore there will be no double patenting rejection for this outstanding application.

### ***Drawings***

The drawings were received on 8/4/2006. The Examiner accepts these drawings.

### ***Allowable Subject Matter***

Claims 1-20 allowed. The following is an examiner's statement of reasons for allowance:

In regards to claim 1, the prior art does not directly disclose of a method for transmitting through interconnections comprising modeling interconnections while taking

into account lumped impedances on the interconnections, determining known frequency bands and characteristic impedance matrices for modal electrical variables, placing at least one end of interconnection at a termination circuit combining inputs at the transmitting circuits according to linear combinations defined by the transition matrix and combining on of the receiving circuits the signals on the transmission conductors defined by the inverse transition matrix, nor would it have been obvious to one of ordinary skill in the art to do so. Claims 2-7 are also allowed as being dependent on the allowable claim 1.

In regards to claim 8, the prior art does not directly disclose of a device for proportioning circuits for transmitting through an interconnection comprising means for modeling the interconnections while taking into account lumped impedances on the interconnections, means for determining the known frequency bands and characteristic impedance and transition matrices, means for proportioning a termination circuit having an impedance matrix approximating the characteristic impedance matrix, means for proportioning one of the transmitting circuits by combining inputs according to linear combinations defined by the transition matrix and means for proportioning one of the receiving circuits the input the signals present on the transmission conductors defined by the inverse of the transition matrix, nor would it have been obvious to one of ordinary skill in the art to do so. Claims 9 and 10 are also allowed as being dependent on the allowable claim 8.

In regards to claim 11, the prior art does not directly disclose of a device for transmission providing transmission channels in a known frequency comprising an

interconnection with transmission conductors and a reference conductor that can take into account lumped impedances of the interconnections, termination circuits arranged at one end of the device with impedance matrix that approximates the characteristic impedances of the interconnections, at least one of the transmitting circuit the combine inputs according to linear combinations defined by the transition matrix and at least one receiving circuit to connect the inputs to the conductors according to the linear combinations defined by the inverse transition matrix, nor would it have been obvious to one of ordinary skill in the art to do so. Claims 12-20 are also allowed as being dependent on the allowable claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Crawford whose telephone number is 571-272-6004. The examiner can normally be reached on Monday - Friday 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rex Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMC

  
REXFORD BARNIE  
SUPERVISORY PATENT EXAMINER